BETH ISRAEL DEACONESS MEDICAL CENTER
A member of CAREGROUP

NEWBORN SUMMARY

Mother's Name: Calhoun (LAST) Emily (FIRST)
Obstetric Provider: Hagen
Primary Pediatric Provider: unknown
BI Pediatric Provider: Ctr. Peds

Mothercard
CALHOUN, EMILY J.
DOB OCT 16, 1979 F 23 1
OBS
0210930 8
ADM 02-25-00
DCB FEB 25, 2000 F
NB
0210932 2
ADM 02-25-00 Infant Card

MATERNAL/ANTEPARTUM HISTORY

Age 23 G 1 P 0

EDC 2/15/00 Blood Type: O1

Screens (check if known):

Rubella	☑ Imm	☐ Non-Imm
Hb_sAg	☑ -	☐ +
RPR	☑ NR	☐ R
GC	☐ -	☐ +
Chlamydia	☐ -	☐ +
PPD (-/+)	☐ -	☐ +
Antibody	☐ -	☐ +
Tox Screen	☐ -	☐ + specify:

CALHOUN, GIRL
DCB FEB 25, 2000
ADM 02-25-00
NB
0210932

Prenatal Care Utilization:
☐ Prenatal Visits < 5 ☐ Initial Prenatal Visit > 28 weeks

Risk Factors/Complications: ↑ Thyroid

Signature:

LABOR

GBS ⊖

Sepsis Risk Factors (check all that apply):
☐ None ☐ GBS+ ☑ Fever - max temp 99.2
☐ PROM ☐ Other:
☐ Antibiotics before delivery

SROM: Date: 2/24/00 Time: 0730A

Analgesia/Anesthesia: CSE / Numorphan

Complications: FSE
IUPC
PIT
shoulder dystocia - maneuvers successful 5:30

Signature: R.N.

DELIVERY

Date: 2/25/00 Time: 512A Sex: ☐ M ☒ F

Route:
☒ Vaginal ☐ vacuum ☐ forceps ☐ breech
☐ C/Sect (reason)
☐ Meconium → ☐ Intubated → ☐ Meconium ↓ cord

Apgars 8 (1) 9 (5) (10)
☐ No Mec. ↓ cords

Resuscitation: Bulb sxn, Manual Stimulation. called 40 ec ward & movement ⊕ dam, pink, will pass fecal bruising ⊕ Reduced & bradycardic pulse ⊕ grasp, some movement, improvement. Clavicles appear intact. World fallen clinically. [illegible]

Signature: M.D./R.

NEONATAL ADMISSION/COURSE

Wt: 8 lb 13 oz Wt: 3990 gm
Lt: 20 (11/4) in Lt: ____ cm HC: 34 cm
Feeding: ☑ breast milk ☐ formula ☐ both
Bilirubin: Max bili 12.2 ☐ Phototherapy
Blood Type: ____ Coombs: ____
Hep B Immunization: ☒ No ☐ Yes ____ dose ☐ HBIG
Sepsis Eval: ☐ CBC: WBC ___ Polys ___ Bands ___
☐ Blood cx: N.G. @ 24 ° ___ 48+° ___
☐ CSF: WBC ___ RBC ___

Signature: R.N.

DISCHARGE

D/C Date: 2/27/00 D/C Wt: 8 lb 8 o

Diagnoses: ☐ Term ☐ Postterm ☐ Preterm ___ wks
☐ AGA ☐ LGA ☐ SGA
☐ R/O Sepsis-no abx's ☐ R/O Sepsis w/abx's

Other Diagnoses:

Recommend F/U: ☐ call __ days ☐ appt __ days ☐ appt 2 wk

Signature: M.

FOLLOW UP

Infant's Name: LAST Calhoun, FIRST Estella Home Tel #: (___) ____
Provider/Clinic: Hanscom Air Force City: Bedford Appt Made? ☐ No ☐ Yes - Date __/__/__
Referrals: ☐ VNA ☐ DSS Medications:
Special Instructions:

DISTRIBUTION:

14-769 Rev 5/97

0001

BETH ISRAEL DEACONESS MEDICAL CENTER
EAST CAMPUS
330 Brookline Avenue, Boston

140 74 80
CALHOUN, EMILY J.
DOB OCT 16, 1976 F 23 1
HAGEN, D OBS
ADM 02-25-00 0210930 8

OBSTETRICAL DISCHARGE PLAN

This discharge plan has been designed to give you information that you will need to care for yourself after you leave BIDM

Discharged to: ☒ Home ☐ Other _____ Social Worker _____ Phone _____

Condition at discharge: Stable following vaginal delivery

EARLY POSTPARTUM DISCHARGE

In regards to early maternal-infant discharge, the patient has been informed of her rights under Massachusetts Law: ☐ YE

Date & Time of delivery: 2/25/00 @ 512 am Date & Time of discharge: 2/27/00 @ 1100 a

Patient elects early discharge: ☐ YES ☒ NO

- Follow-up services offered? ☐ YES: Accepted ☐ *See services below* Discharge in the eve. / night ☐
- Follow-up services declined? ☐ YES Insurance authorization: ☐ YES ☐

If you believe that your rights under Massachusetts law have been denied, you may call the Department of Public Health 1-800-436-7757, 24 hours / day. Someone will help you. TDD/TTY: 1-800-439-2370.

SERVICES

These community services have been arranged:

☐ Skilled Nursing / Home Visit ☐ Social Services ☐ Other _____

Agency Name _____ Phone _____

ontact Person: _____ Services requested for: _____

INSTRUCTIONS

DIET: ☐ No Restrictions ☒ Type: Lactation : Instructions Provided: ☐ Verbal ☐ Writ
☐ Specific Advice: ↑fluids, ↑calories, ↑protein, ↑calcium

MEDICATIONS: ☐ Prescriptions: ☐ NO ☐ YES: Instructions Provided: ☐ Verbal ☐ Writ
☐ Specific Advice: No Aspirin products (tylenol/motrin ok

ACTIVITY: ☐ As per Postpartum Advice sheet for: ☒ Vaginal Delivery ☐ Cesarean Deliv
☐ Specific Advice:

Teaching Materials Received: ☒ "Caring for Your Newborn" ☒ Infant feeding resources: breastfeeding information
☒ Postpartum advice sheet: ☒ Vaginal ☐ Cesarean ☒ "When Should You Call Your Health Care Provide
☐ Other specific instructions: No vaginal inserts x 6 weeks. Call MD ↑ temp ↑ pain, ↑ bleeding. Please read "Warning signs"

FOLLOW-UP APPOINTMENTS

☒ Obstetric Provider: Dr. Hagen @ 6 weeks ☒ Pediatric Provider: Hanscom @ 1 wk AFB

The above material has been reviewed with me. My questions have been answered and I understand the contents.

2/27/00
DATE

Patient Signature

(617) 282-1769
Phone

(617) 667-6100
Unit Phone

Jocelyn S. Lennon RN
Nurse Signature

Name of Interpreter if utilized

704-402 10/97

copies: white - chart; yellow - patient; pink - unit

RIMARY CARE HA DAUB,ERIC C 29 Feb 2000 1115 SDA BHAA
CMT: 4 day old no stools

sjh
NSURANCE/YES/NO:

P: PULSE: 154 RESP: 24 TEMP: 97.2 HT: WT: 8 13oz AGE: 4 days

LLERGIES: NKDA

Born 8#13oz
D/C 8#8oz

Time Arrived: 1110 Time Screened: 1113 Time Seen:
Tel.# Correct: (Y) N Tetanus Up To Date: (Y) N **Flying Status: Y (N)** Smoker: Y N
Injury: ETOH Involved Y (N) **PRP: Y (N)** Peds: Family Member Smokes: Y (N)
Records Location: HAFB

Medications, diet aids, nutritional supplements or vitamin/minerals: Ø

4 day old ♀ no stools yet

ADDITIONAL COMMENTS:

Paul Best
4/1031/Fmt

CALHOUN,Estella 4D
SUBJECTIVE: ~~40-year~~-old female infant born at 37 weeks in ~~bed is a~~ hospital after an uncomplicated pregnancy with uncomplicated labor and delivery; but there was shoulder dystocia and movements in the right shoulder have been limited. Was passing meconium and ne until three days ago and since that is only having wet diapers. Continues to breast-feed. Mother noticed jaundice in the ajunctival yesterday that has worsened since then. Birth weight was 8 lbs 13 oz, discharge weight 8 lbs 8 oz. PMHX: As above
SOCIAL: First of the family. Father is on remote tour, however is currently at home on leave. They live on base. Mother has a follow-up appointment with obstetrician this afternoon. MEDS: None.
OBJECTIVE: Awake and alert, VSS, afebrile. Jaundice on head, torso, arms to the hands, and legs to the feet. Red reflexes present bilaterally. Lungs are clear auscultation, RRR, no murmur, no gallop. Abdomen is nondistended, nontender, bowel sounds normoactive. No skin rash other than the jaundice. Skin is loose. Weight today is 8 lbs 13 oz. there are no masses, crepitance, or pain with palpation of the right clavicle. There does appear to be a mild favoring of the opposite arm.
ASSESSMENT: Neonatal jaundice and breast fed baby. No bowel movements in 3 days.
PLAN: Check bilirubin and CBC. If these are substantially elevated will check antibody screens. Otherwise follow-up in two days.

EC Daub

Eric C. Daub, MD
Capt., USAF, MC

Addendum: BU 18.9 11/15/239
BC 0.2
Total 19.1

L/44 M/9 G/46 → Jaundice light, feedings rev in 2 days

EC Daub

1/578-06-8634 CALHOUN,ESTELLA A41
25 Feb 2000 FEMALE W: H:617 282 1769
Spon: CALHOUN,SILAS CIC:
CS: Rank: 1LT D:
F600 Unit: 0503 IN BN 01 CO D R RR: •E

15

•E•(s10N
66TH MEDICAL GROUP DIV ION: 66 MED GP HANSCOM
Personal Data - Privacy Ac of 1974 (PL 93-579) Au mated Version of SF600
Printed: 03 Mar 2000@1018

PRIMARY CARE HA DAUB,ERIC C 03 Mar 2000 1000 SDA BHAA
REF: CMT:
RSN: requested follow up per Daub
INSURANCE YES/NO:

BP: — PULSE: 156 RESP: crying TEMP: 100.2 HT: - WT: 7lbs4oz 3.3kg AGE: 1wk

ALLERGIES:
Ø

Time Arrived: 1015 Time Screened: 1040 Time Seen:
Tel.# Correct: Y N Tetanus Up To Date: Y N **Flying Status: Y N** Smoker: Y N
Injury: ETOH Involved Y N **PRP: Y N** Peds: Family Member Smokes: Y N
Records Location:

Medications, diet aids, nutritional supplements or vitamin/minerals:
Ø

ADDITIONAL COMMENTS: c/o - f/u high bilirubin
Calhoun, SA

CALHOUN,ESTELLA
SUBJECTIVE: Returns today to follow-up of hyperbilirubinemia. Her parents report that she has not been eating last day is not interested in suckling.
OBJECTIVE: She is somnolent, skin is loose on her, weight is down nearly one lb. Temperature 100.2. Total bilirubin 15.
ASSESSMENT: 1-week-old child with significant weight loss, recovering from hyperbilirubinemia, low grade fever.
PLAN: I made arrangements for her to be admitted at Emerson hospital by the on-call pediatrician copies of her chart notes were sent with her.

E.C.D.
Eric C. Daub, MD
Capt., USAF, MC

01/578-06-8634 CALHOUN,ESTELLA A41
25 Feb 2000 FEMALE W: H:617 282 1769
Spon: CALHOUN,SILAS CIC:
CS: Rank: 1LT D:
SF500 Unit: 0503 IN BN 01 CO D R RR: •E

*******PATIENT INSTRUCTIONS*******
Please call Sierra Military Health at 1-888-999-5195
after 3 business days to schedule your appointment.

NAME: CALHOUN,ESTELLA
01/578-06-8634
USA FAM MBR AD
ACV CODE: C
CHAMPUS

DOB: 25 Feb 2000
SEX: FEMALE
Home Ph#: 617 282 1769

TO: S-EMERGENCY MEDICINE
ORDER#: 000303-00175
DATE/TIME OF REQUEST: 03 Mar 2000@1118

FROM: DAUB,ERIC C
Wk Ph#:
Pager#:
PRIORITY: STAT

APPT TYPE:
REASON FOR REQUEST:
Newborn with weight loss and j

ADDITIONAL INFORMATION:
Neonatal hyperbilirubinemia was resolving, but now not feeding and has 1# weight loss. Please R/O sepsis and re-evaluate bilirubin.

PLEASE HAVE RESULTS SENT TO:

PRIMARY CARE MANAGER'S NAME
C/O 66TH MEDICAL GROUP/SGOFA
NURSE'S STATION
90 VANDENBERG DR., BLDG 1900
HANSCOM AFB, MA 01731-2139

OR FAX TO: (781) 377-9521

NOTE: IF YOUR SPECIALIST DETERMINES THAT YOU NEED AN OUTPATIENT PROCEDURE, THE SPECIALIST WILL NEED TO CONTACT SIERRA'S HEALTH CARE FINDERS AT 1-888-333-4522 FOR AUTHORIZATION FOR THE PROCEDURE

CONSULTATION REPORT

E

6TH MEDICAL GROUP DIVISION: 66 MED GP HANSCOM
ersonal Data - Privacy Act of 1974 (PL 93-579) Automated Version of SF600
Printed: 09 Mar 2000@1418

RIMARY CARE HA COLEMAN,RUSSELL 09 Mar 2000 1425 SDA BHAA
CMT: wt check
S csm
NSURANCE YES/NO:

deferred per Provider.

P: PULSE: RESP: TEMP: HT: WT: 8 14 1/2 oz AGE: 13 days

B.W. 8 13 oz

==

LLERGIES: NKDA

'ime Arrived: 1416 Time Screened: Time Seen:
'el.# Correct: Y N Tetanus Up To Date: Y N **Flying Status: Y N** Smoker: Y N
njury: ETOH Involved Y N **PRP: Y N** Peds: Family Member Smokes: Y N
Records Location: HAFB

ledications, diet aids, nutritional supplements or vitamin/minerals:

weight check. 80 ml's every 1 1/2 hrs. J. Hollands

DDITIONAL COMMENTS: 8-10 weight + dirty diapers

[illegible handwritten clinical notes]

Russell T. Coleman, Maj, USAF, MC
44K3, Pediatrician
66th Medical Group (AFMC)
Hanscom AFB, MA 01731-2139

==

1/578-06-8634 CALHOUN,ESTELLA A41
25 Feb 2000 FEMALE W: H:617 282 1769
Spon: CALHOUN,SILAS CIC:
CS: Rank: 2LT D:
F600 Unit: 0503 IN BN 01 CO D R RR: •E

CHILDREN'S HOSPITAL
ADMISSION HISTORY AND PHYSICAL

MEDICAL RECORD# 2077262 -0000003009173034
PATIENT'S NAME: ESTELLA CALHOUN
ADMISSION DATE/TIME: 03/09/2000 21:00:00 H&P DATE/TIME: 03/10/2000 03:03:03

ATTENDING PHYSICIAN:
~~ROBERT PASCUCCI 70674~~ TRAN

PRIMARY CARE PROVIDER/REFERRING PHYSICIAN:
DR COLEMAN
HANSCOMB AIRFORCE BASE
781-377-7059

CHIEF COMPLAINT:
seizure

HISTORY OF PRESENT ILLNESS
Estella Calhoun is a 13 day old female admitted from home after parents noticed twitching of left upper and lower extremities with eyes deviated to L. She had been previously intermittently fussy for one day and had 2 episodes of emesis with feeds. She was recently hospitalized at Emerson for hypernatremic dehydration. She was evaluated by PMD today for weight hydration check. She appeared well, no seizure activity apparent, and was sent home. After arriving home, parents noted further twitching of L extremities and brought to ED. She was otherwise well. Feeding BM by bottle well earlier in day. No fever or ill contacts. In ED she was noted to have seizure activity of L extremities. She was given ativan and intubated for subsequent apneic spell. She was intubated with versed, pavulon, atropine. She received ceftriaxone after blood and urine cultures were obtained. Head CT performed which revealed R IVH and Sinus Thrombosis. In ED T 38'

PAST MEDICAL HISTORY
Born at 37 weeks. Mom does not have prenatal screens availabe. Self reports blood type O+. No history of herpes in either parent. Pregnancy remarkable for moderate high BP at end of pregnancy. Low grade fever during deliver. Mom GBS-. No antibiotics given. Born NSVD at 37 weeks, 8# 14oz. R shoulder dystocia with mild R Erb palsy. Discharged DOL 2. Breast feeding poorly at home with minimal milk supply. Readmitted to Emerson hospital on 3/3 with hypernatremic dehydration (Na 179) and weight loss (BW 8 # 13oz to 7# 4oz). During hospitalization HUS performed was normal by report. She received IVF hydration and had improved feeding with BM by bottle. Discharge on 3/6 with Na 146 wt 8#7oz. Weight steadily increasing since DC with todays weight 8# 14oz. Also, She has history of hyperbilirubinemia with peak of 19.1 on 2/29. No phototherapy given.

CURRENT MEDICATIONS:
None

SOCIAL/FAMILY HISTORY:
Lives with Mom and Dad and friend. Baby in sole care of parents. Fathy is in Airforce and anticipates leave for 6 month away duty beginning 3/11. Married couple with same last name. Current stress between MGM and father.

LISTED ALLERGIES:
Nkda

IMMUNIZATIONS:
HEP B AT BIRTH

PHYSICAL EXAMINATION:

TEMP: 36.3C HEART RATE: 159 RESP RATE: 21

Entered and signed electronically by Kelly Cant 03/10/2000 03:03:03

Printed by: Kelly Cant (87205) 03/10/2000 03:10:47 Page 1

THIS IS A COPY OF THE ELECTRONIC RECORD - DO NOT ALTER

CHILDREN'S HOSPITAL
ADMISSION HISTORY AND PHYSICAL

MEDICAL RECORD# 2077262 -0000003009173034
PATIENT'S NAME: ESTELLA CALHOUN
ADMISSION DATE/TIME: 03/09/2000 21:00:00 H&P DATE/TIME: 03/10/2000 03:03:03

HEIGHT: 51cm (WNL) WEIGHT: 4.2kg HEAD CIRC: 35cm
BLOOD PRESSURE: 72/42 O2SAT: 98%

General: sedated and paralyzed intubated infant

Skin: few rare errythematous papules on upper extremities, trunk, blanching

HEENT: conjunctival hemorhages bilaterlly, pupils small and reactive, palate intact

Neck: no adenopathy, no skin defects

Chest: CTA

Cardiac: S1S2, RRR, intermittent faint 1/6 systolic murmur at LLSB

Abdomen: soft, no hepatosplenomegaly

GU: Female genetalia, patent anus

Extremities: warm, cap refill brisk

Neurological: sedated, past paralysis now with small spontaneous movements. Decrease movement R arm compared to L. Unable to elicit reflexes. No clonus.

LABORATORY:	DATE/TIME	RESULT	RANGE
Specific Gravity, Urinaly	03/09/00 22:44	1.008	1.003-1.030
Microscopic Urinalysis	03/09/00 22:44	Macro Ok	N/A
Appearance, Urinalysis	03/09/00 22:43	Clear	N/A
Color, Urinalysis	03/09/00 22:43	Yellow	N/A
Nitrite, Urinalysis	03/09/00 22:43	Neg	N/A
Glucose, Urinalysis	03/09/00 22:43	Neg	N/A
Urobilinogen, Urinalysis	03/09/00 22:43	0.2	N/A
Blood, Urinalysis	03/09/00 22:43	Neg	N/A
Bilirubin, Urinalysis	03/09/00 22:43	Neg	N/A
Protein, Urinalysis	03/09/00 22:43	Neg	N/A
Ph, Urinalysis	03/09/00 22:43	8.0	N/A
Wbc Enzyme, Urinalysis	03/09/00 22:43	Neg	N/A
Ketone, Urinalysis	03/09/00 22:43	Neg	N/A
Creatinine, Plasma	03/09/00 22:33	0.4 Mg/Dl	0.2-0.4
Neutrophil	03/09/00 22:33	32 %	17-33
Monocyte	03/09/00 22:33	10 %	7-14
Lymphocyte	03/09/00 22:33	52 %	45-67
Atypical Lymphocyte	03/09/00 22:33	2 %	0-6
Eosinophil	03/09/00 22:33	4 %	0-6
Co 2	03/09/00 22:27	19 Meq/L	17-29
Glucose, Plasma	03/09/00 22:27	121 Mg/Dl	60-115
Calcium, Plasma	03/09/00 22:27	10.1 Mg/D	8.0-10.5
Blood Urea Nitrogen, Plas	03/09/00 22:27	10 Mg/Dl	4-19
Magnesium, Plasma	03/09/00 22:26	1.7 Mg/Dl	1.5-2.2

Entered and signed electronically by Kelly Cant 03/10/2000 03:03:03

Printed by: Kelly Cant (87205) 03/10/2000 03:10:47 Page 2

THIS IS A COPY OF THE ELECTRONIC RECORD - DO NOT ALTER

EMERGENCY DEPARTMENT FLOWSHEET

HT:
WT: 4.1
☐ NPO
IMMUNIZATIOI
☐ UTD
☐ NO
MODE OF ARF
☐ WALK IN
☐ TRANSFER
X-RAY:
☐ Sent
☐ With Pt.
SPECIMENS:
☐ UA
☐ CVS
☐ TC

EXPECT ☐ P.C.P. DR. Colman / Hyannis Com

Calhan, Estelle

Date	Time	Age
3/9/07	2040	2wks

TRIAGE STATUS M ☒ S ☐ N ☐ U ☒ Move Ahead ☐ E ☐

Allergies: NKA ☒

EXPOSURES: 0

PRECAUTIONS: C

CC: Twitching (L) side of Body

HPI: twitching intermittently (L) side noted today. Presents (R) twitching of (L) side ~2 mins. (R) eye shoulder dystocia

PMH:

MEDS: C

Antipyretic: Last Taken:

RN Signature K Regalia CA Signature

Time	Temp	Pulse	Resp.	B.P.	O_2Sat	GCS	Pupils Size R	Pupils Size L	Pupils Reaction R	Pupils Reaction L	Medications	Observations Interventions, & Patient Responses
2040	38 (R)	RR	39	104/57	92/RA							PIV #24 placed (R) foot
2115												in 1 min focal sz - L arm face
2115											Ativan .2mg IVP	L leg - 6 cm
												Charge - Cries vigorous
2120												multiple episodic of
												apnea - + Sz.
2130		200	50's		100% RA							
2135				96/45								pt continue to cry
												mittent (L) sided sz
												intermittent apnea
												resolved apnea c
												stimulation - KS
2137											atropine .1mg	
2138		188	Brady		100%						midaz .4mg	
					RR agrees K						succinylcholine 8mg IVP	
					96							pt intubated c
												3.5 ett orally
2140		184	Brady 80/45		100% Brady resp							pt cont. c (L) leg
2143											Ativan .2mg IV	twitch
2145												D stick 78
2146											Pavulon .4mg IV	
2147		190			100% Brady resp						Versed .4mg IV	
												#8 NG (R) NOSTRIL
2148											Ceftriaxone 200mg IV	
2150											Phenobarbital 8mg IV	

0150

EMERGENCY DEPARTMENT FLOWSHEET
(Continued)

Calhoun, Estella
ADDRESSOGRAPH
2077260

PT. NAME _____

ADDRESS _____

MR. # _____

	VITAL SIGNS					PUPILS			INTERVENTIONS	
Time	Temp	Pulse	Resp.	B.P.	O_2Sat	GCS	Size R / L	Reaction R / L	Medications	Observations Interventions, & Patient Responses
2155		202	46	95/58	94%					labs drawn & sent
2200		201	30	76/52	100%					
2201									Phenobarbital finished & flushed	
2202	36.7(R)	185	56	87/46	97%				NSB 40 cc	ph 7.6
										pt cooling pads + OR + UC
2210		162		102/52	94%				wasted Fentanyl 84 mcg IV	Hubbard/KSW
2217										to CT
2230		116			100%	assisted				Pulse Warm, light on @ 30 inches
2240		156		79/45	96% (80)				Ativan .2mg IV x1	L side facial sag
2246									Fentanyl 50mcg IV x1	
2247									Pavulon .4mg IV x1	
2250		146		77/40	100%	assist			NSB 40cc x1	Ls clear bilat.
2310		150		66/38						Light called to TN
2315									NSB 40cc x1	awaiting transport
2320		143		77/36	100%					
2340										to TN

0152

- Ready to be extubated, carefully to monitor closely
NPO/IVF with close monitoring
- Abx pending cultures
- Will discuss with neurology - MRI/MRV/MRA pending. EEG to be done. Check PB level
- Check LFT, coagulation.

Shirley

3/11/00 730A 3/11/00. Neurology MRI: showed dense clot along length of superior sagittal sinus.

Neurology - du Plessis

One further seizure overnight - so far has received PB 30/kg load and 5/kg maintenance

Infant remains somnolent/irritable. Mild persistent R UE monoparesis (BAP) and hyperreflexia in UE

MRI shows extensive thrombosis in the dural veins and deep venous system with R > L hemorrhagic infarct. Infant fairly stable at this point.

Although the involvement of the deep venous system is an indication for anticoagulation, the presence of hemorrhage, in my opinion, precludes this.

✓ PB level. Aim for 20-30 mg/dl

DOB 2/25/00

CONSULTATION REQUEST/REPORT

USE PLATE OR PRINT

To Doctor or Service: Neurology

Diagnosis:

PT NAME: Calhoun (LAST) (FIRST)

DATE: DIV:

MED REC. NO: 20772 62

State specific points on which consultant's opinion is desired

3/10/2000

V/S

3/10/00 09:30

Neurology - duBerois

Name of Attending Physician requesting consultation

Consultant's report (to be signed by consultant)

History as per Dr Hoch
Essentially term infant with
difficult delivery and BBP,
good Apgars but poor
breastfeeding with hypernatremic
dehydration corrected but rearrived
NICU briefly with focal seizures
abdl mental status and
CT findings suggestive of SST
+ deep vein thrombosis with
hemorrhage (IVH + IPH (R thalamus)
Exam now shows extubated
infant. Appears with inability
to sustain eye bid or
Vertical full/saccades (Okn)
No spontaneous eye opening
Slow asymmetric smile (↓ R > L)
EOMF bilaterally. Pupils 2½ → 3
disc difficult to see. Hypotonic throughout with 1+ DTR with spread
↓ R biceps jerk. Does have
some bilateral flexion on R but less
than L
Impression: Neonatal encephalopathy with sz - of perinatal onset
and course with hypernatremic dehydration, possible →
cerebral vein thrombosis. Pt. would √MRI/MRV/MRA. ESS
LP for CSF and Pathic studies, coagulopathy work up. ETT

14 day W & C 4/0
hypernatremic dehydration
Now c seizures +
sagittal sinus thrombosis,
HPI:
Mom:
GBS neg
Wt = 3920 HC = 34
37wks ; 8# 14oz ; born c BI
traumatic vaginal delivery
shoulder dystocia on Right
→ Erb's palsy (improving)
Apgars 8, 8
At time DOL #2
breastfeeding -- poor

Date Signature of Attending Consultant

COPY 1 - MEDICAL RECORD COPY 2 - CONSULTANT'S COPY

0186

Children's Hospital Boston
300 Longwood Ave
Boston, MA 02115

Admit Date: 1/1/69
Discharge Date: 1/1/00

CHB MRN: 207-72-62
Patient Name: CALHOUN, ESTELLA
DOB/Age/Sex: 2/25/00 7 years Female

Patient Location:
Patient Type: History
Financial #: HIST2077262

Radiology

CT Head WO Contr

Originated By		Event Date	3/9/00 10:13:30 PM EST
Signed By	ROBSON MD, CAROLINE D	Signed Date/Time	3/10/00 12:43:50 PM EST
Authenticated By	ROBSON MD, CAROLINE D	Authenticated Date/Time	3/10/00 12:43:50 PM EST

CT HEAD WITHOUT CONTRAST

CLINICAL: 13-day-old girl with left facial seizure, rule out hemorrhage, malformation.

TECHNIQUE: 5 mm axial images were obtained from the skull base to the vertex without IV contrast. Prior studies are not available for comparison.

FINDINGS: There is a hemorrhage in the right lateral ventricle. A small focus of hemorrhage is also identified in the right thalamus. The right internal cerebral vein appears hyperdense as does the superior sagittal and straight sinuses and the torcular. The left thalamus appears slightly hypodense as does the corona radiata.

IMPRESSION:
1) Thrombosis of the dural venous sinuses and the right internal cerebral vein.
2) Intraventricular hemorrhage into the right lateral ventricle.
3) Small intraparenchymal hemorrhage in the right thalamus and possible hypodense areas in the left thalamus and the left corona radiata may indicate venous infarction.

MTC 523 3/10/00

I, the teaching physician, have reviewed the images and report with the trainee and agree with the findings.

Children's Hospital Boston

CHB MRN: 207-72462
Patient Name: CALHOUN, ESTELLA
DOB/Age/Sex: 2/25/00 7 years Female

Radiology

MRA Head WO Contr

Originated By		Event Date	3/10/00 3:17:00 PM EST
Signed By	ROBERTSON MD, RICHARD L	Signed Date/Time	3/11/00 2:33:22 PM EST
Authenticated By	ROBERTSON MD, RICHARD L	Authenticated Date/Time	3/11/00 2:33:22 PM EST

MRI AND MRA AND MRV OF THE BRAIN, 3/10/2000

HISTORY: A 13 day old term infant with history of hypernatremia and dehydration with focal seizure and altered mental status.

TECHNIQUE: Sagittal T1, axial T2, axial FLAIR images of the entire brain were performed. Then, 3D time-of-flight MR angiogram of the brain was performed followed by MRV.

FINDINGS: There is hemorrhage seen within the posterior horn of the right lateral ventricle. There is also a parenchymal hemorrhagic infarction within the right thalamus. There is no hydrocephalus. There is no midline shift. No focal signal abnormality is identified within the brain parenchyma.
There is extensive venous thrombosis involving the superior sagittal sinus, straight sinus, internal cerebral veins and right terminal vein.

IMPRESSION:
Extensive dural venous sinus with small hemorrhagic right thalamic infarction.

529 3/10/2000
I ,the teaching physician, have reviewed the images and report with the trainee and agree with the findings.

CHILDREN'S HOSPITAL - BOSTON, MA
Department of Radiology - Diagnostic Report

PATIENT: ESTELLA CALHOUN

MED REC NO	BIRTHDATE	SEX	ORDER DATE	ORDER ID	REQ LOC	RESULT ID / ADDEND
2077262	Feb 25, 2000	F	Mar 14, 2000	2407135	7N	1005276 / 0

REASON FOR EXAM: SZS

REQUESTING MD: UNKNOWN PROVIDER

PROCEDURES: 1219494 MRBRAIN MRI BRAIN WITHOUT CONTRAST

INDICATION: Seizures, known internal cerebral vein and dural sinus thromboses. Evaluate for inter change.

TECHNIQUE: Sagittal T1, axial T1, FSE T2 and LSDI images of the brain were performed without intravenous contrast.

COMPARISON: MR, brain, 3/10/2000, CT, head, 3/9/2000

MR, BRAIN: There is redemonstration of diffuse high signal abnormality on the T1-weighted images within the left transverse, superior sagittal, and straight sinuses, within the right thalamostriate and internal cerebral veins and vein of Galen, as well as intraventricular blood within the right lateral ventricular trigone. Since 3/10/2000, there has been significant interval decrease in T1 hyperintensity of the signal abnormality within the left transverse sinus. There has been interval increase in signal abnormality within a right superior frontal cortical vein. More conspicuous since the prior study, are areas of signal abnormality within the right thalamostriate veins and in the anteromedial right thalamus; these areas appear unchanged, however, since the prior CT scan of 3/9/2000.
There is no new parenchymal hemorrhage or evidence of restricted diffusion.

IMPRESSION:
1.
Deep cerebral venous and dural sinus thromboses, as detailed above. Interval progession of thrombosis involving a right superior frontal cortical vein.
2. Stable small hemorrhagic lesion in right anteromedial thalamus. No new evidence of parenchymal hemorrhage/infarct.

529 3/14/2000

I ,the teaching physician, have reviewed the images and report with the trainee and agree with the findings.

Children's Hospital Boston

A teaching affiliate of Harvard Medical School

Department of Physical Therapy & Occupational Therapy Services
300 Longwood Avenue
Boston, Massachusetts 02115
phone 617-355-7212 | *fax* 617-731-9705

Occupational Therapy Evaluation
RE: Calhoun, Estella
MR#: 2077262
DOB: 2/25/00
DOE: 4/1/03

Estella is a 3 year, 1 month old female who was referred to occupational therapy for evaluation by Dr. Gregory Lawton because of concerns with sensory processing. Estella is followed by Dr. Adre Du Plessis in the Fetal-Neonatal Neurology Department at Children's Hospital because of a history of neonatal dehydration and an extensive dural vein thrombosis with seizures in the neonatal period. Please refer to the medical chart for specifics on medical history for this will be reviewed only briefly for this evaluation. Estella is the product of a full term otherwise unremarkable pregnancy. During the first several days of life she had difficulty with feeding and became increasingly sleepy At 14 days of life she developed a left focal seizure and during her evaluation at Children's Hospital which included several MRI scans and MR venogram/arteriogram she was found to have extensive dural vein thrombosis. Her seizures were easily controlled with Phenobarbital and she was discharged home without further seizure activity. Mom noted that in an earlier neurological exam, there was some asymmetry where the left side was noted to be lower in tone in comparison to the right, however this has reportedly "evened out".

Once discharged home, early intervention was initiated and reportedly Estella received weekly treatment by occupational therapy for developmental concerns until the age of 1-½ years, then she was discharged because she reached all developmental milestones. Reportedly, Estella did relatively well at home and mom did not have any concerns. Mom reported that she feels that she kept Estella sheltered in her earlier life and when she entered preschool at age two she noted that there was something wrong for Estella was very aggressive, impulsive and high energy with the other children. She then initiated a re-evaluation by occupational therapy in early intervention and treatment was re-introduced for sensory processing concerns. Unfortunately, treatment was initiated one month prior to Estella's third birthday so there was limited time for treatment. Mom reports that most of the treatments focused on parent education and then Estella was discharged. Mom reports that a sensory diet was not established during this time. Mom's reason for this evaluation was to find out if Estella needed further treatment and what were her options to receiving that treatment. Mom did not have any concerns with fine motor skills at this time.

Evaluation Findings: Results for this evaluation were taken through parent questionnaire, parent interview, and clinical observation. Overall, results from testing today indicates that Estella demonstrates significant sensory defensiveness and associated state regulation difficulties that are impacting her ability to function in everyday activity such as school and hygiene tasks and with her interactions with peers. State regulation is the ability to maintain one's arousal level in a calm and organized manner. Sensory defensiveness is the overreaction of body's normal protective senses to everyday sensory input.

In terms of state regulation, Estella is described as a child that is impulsive and always on the move. She is a child that has a lot of energy and she cannot sit still for a whole meal. When eating, Estella will have a bite of her food and then she needs to run around then return back to her meal and have another bite. If mom does not allow her to do this then Estella will not eat. Estella loves to rearrange the furniture in her home and pushes all the pieces around the room. Estella also likes to use push toys, she takes the couch apart and jumps on the cushions and she likes to listen to music and dance when she is home. Mom reports that she has

difficulty in other settings because she is not allowed to participate in these activities and they are not appropriate in other settings. Mom is unable to take Estella to any crowded setting such as a mall because Estella becomes to high energy that she is difficult to control. However when she is at a large family function, Estella will become clingy to her mother, shy and she needs more time to adjust to the setting and the people.

At school, Estella's teacher has noted that she has her good and bad weeks. There are times that Estella will just run in circles and when she participates in this activity it can often lead to overstimulation. Estella has a history of aggressiveness with other children in her school setting and has physically acted out towards them. Mom reports that her impulsiveness and aggressiveness has decreased at school and at home, however at this point in the school year the teacher and the children know what will set Estella off to react that way and have avoided those actions as best as they can. Mom will also avoid certain activities that set Estella off at home because she knows that this cause Estella to be very upset. Some of the things that lead her to this point include time outs, washing her hair, a sudden change in activity and interactions with her brother or other children. When Estella becomes upset, she screams, cries and makes herself vomit. After she has had her time by herself to settle, she then finds her pacifiers. Estella has two pacifiers; one to suck on and one to rub on her body and this is the only thing that will help Estella calm. In terms of sleeping, Estella is described as a child that has difficulty settling down at night and once she is asleep, Estella wakes up often. Estella participates in a nighttime to help settle her and if she does not participate in this routine then she has more difficulty settling at night. Estella needs down time and has a bath and then watches a movie before she falls asleep. Estella has never slept through the night and will climb into her parents bed every night.

In terms of sensory processing skills, Estella demonstrates sensitivities in the areas of tactile, auditory, visual and olfactory input. In terms of tactile input, Estella is a child that avoids playing with messy things and dislikes having her hands dirty. She dislikes going barefoot on the sand and is overly ticklish. She becomes upset if she is unexpectedly pushed or bumped into by another child or person and she has specific clothing preferences. Estella does not like clothing around her neck, sweaters, jeans or tight fitting clothing. She does not like hat or scarves and she has a particular way she wears her socks and keeps them scrunched at her ankle. She prefers clothes that are loose fitting and soft material. In terms of hygiene tasks, Estella is a child that does not like her face washed and she hates water on her face. Estella absolutely hates having her hair washed and screams and cries during and after this task. She prefers baths over showers and does not like her teeth brushed. In terms of oral input, Estella is constantly exploring objects by putting them into her mouth. She likes to chew on everything, in particular her sleeves, hands and whatever she can put in her mouth. Estella has always been a picky eater and although she continues to have specific food preferences, she now is eating a wider variety of things. As an infant Estella loved her bottle and never really transitioned to baby food because she didn't like it. Estella is very specific about the temperature of her foods and it has to be warm or room temperature and can not have any cold spots. She likes chewy, crunchy and smooth foods. She does not like chunks of things in her sauce. She will only eat certain brands of foods and if she does not have that specific brand then she refuses to eat it. She is a child that eats five small meals a day rather than three larger meals. In terms of olfactory input, Estella has a very strong sense of smell and she can smell everything. She notices subtle smells and she refuses to use public bathrooms and her family will use a different bathroom than her so she will not have any difficulty using the bathroom at home. She explores objects by smelling them and will become aware of smells that nobody else in the room will notice. In terms of visual input, Estella is extremely sensitive to bright florescent lights and sunlight and needs time to adjust to light changes. When it is sunny out, Estella needs to wear sunglasses to function. Estella is sensitive to moving toys such as wind up toys and does not like to look at them. In terms of auditory input, Estella is extremely sensitive to loud noises and is easily frightened by them. Estella notices distant noises and this will distract her.

In terms of gross motor function, mom does not report any excessive tripping or falling. Mom reports that Estella has had difficulty learning to pedal a tricycle, however she feels that the type of tricycle she is learning on is not an easy tricycle to ride and plans on purchasing another one. Estella is able to jump, run and hop without difficulty.

During today's evaluation, a gross motor screen was completed in the sensory motor room and Estella was noted to have good motor planning skills and good proximal stability. She was able to plan out actions and initiated and set up a crashing activity with mats and a wedge and she was able to motor plan out an action to get into and out of a barrel. She was able to maintain a sitting position when resistance was given and she was able to maintain upright postures when completing tasks that challenged her posture (walking over uneven mats). Initially, Estella was in an extremely high arousal state and spoke in a loud voice and was in constant motion during the evaluation. However, Estella independently initiating heavy work and proprioceptive activity such as jumping activities, crashing into crash mats, lying under a weighted mat, climbing over uneven surfaces, running back and fourth in the room and by pushing the wedge and pulling the weighted mats about the room for approximately 30-40 minutes. Following this input, Estella rubbed vibration toys on her legs and back and there was a notable difference in her arousal state where she was calmer and more organized. She then participated in a vestibular movement activity while swinging on a platform swing for a few minutes in slow rhythmic rocking motion. This input appeared to further calm her and organize her to a point where she was able to sit for short periods of time and play with a toy, which is something that she appeared not to be able to do prior to receiving this input.

Summary: Estella is a 3 year, 1 month old female who was referred to occupational therapy for evaluation by Dr. Gregory Lawton because of concerns with sensory processing. Estella is followed by Dr. Adre Du Plessis in the Fetal-Neonatal Neurology Department at Children's Hospital because of a history of neonatal dehydration and an extensive dural vein thrombosis with seizures in the neonatal period, which was easily controlled with Phenobarbital. Mom reported that in an earlier neurological exam, there was some asymmetry where the left side was noted to be lower in tone in comparison to the right, however this has reportedly "evened out". Estella has a history of occupational therapy treatment through early intervention in her early life to address developmental skills successfully. However, she was then re-evaluated by EIP because of sensory processing concerns and was treated for a month prior to her discharge on her third birthday. During today's evaluation, Estella demonstrates significant sensory defensiveness and associated state regulation difficulties that are impacting her attention, ability to participate in activities of daily living (preschool, hygiene) and her interactions with peers. Estella is constantly seeking out proprioceptive and heavy work input throughout her day, however the activities that she seeks out are inappropriate to participate in all settings and per mom's reports some of the activities that she chooses to participate in often lead her to a higher arousal state. After participation in heavy work activities for approximately 30 to 40 minutes, Estella was notable more calmer and organized then when she initially arrived, which suggests that this input helped improved her overall sensory processing skills. Estella also demonstrates a number of sensitivities particularly with auditory, tactile and visual input.

Recommendations: It is strongly recommended that Estella receive direct occupational therapy services from a therapist who is familiar with working with children with sensory integrative deficits. Her therapist should focus on addressing Estella's sensory processing difficulties and her program should include instruction in the Wilbarger touch pressure program and a sensory diet to reduce sensory defensiveness and improve state regulation. The therapist should also explore the benefits of using Therapeutic Listening (www.vitallinks.org) as part of her sensory diet for additional assistance. In addition the occupational therapy program should work with the family and the rest of Estella's team to explore sensory activities and environmental modifications to assist with state regulation and the reduction of sensory defensiveness. The therapist should provide education to the family and the team regarding sensory integration. The family may

find the website www.sinetwork.org helpfu. in finding readin.g material and additional information about sensory integration. Lastly, occupational therapy should consider to begin to develop state regulation concepts using a program such as, "How Does Your Engine Run?". This program should be carried out at both home and school and should be modified for maximum therapeutic development. For example, the team working with Estella may want to decide to use specific concepts for different arousal levels (i.e. excited, anxious, nervous, overwhelmed) and decide how to present these concepts to her (through pictures). Once she has developed an awareness of these concepts she should learn to relate them to her own behaviors or level of arousal. Once she can identify this level of arousal with adult assistance, then she should assist in selecting an action that would improve her level of arousal. For example, Estella may be asked, "What is wrong?" when it looks like her level of arousal has changed and show various pictures that represent the different arousal level. Then her response will be to select one of the pictures that represents how she is feeling. Next she will be given pictures of sensory diet choices (i.e. go to a quiet area or do a heavy work activity) to choose from and be told, "You have 15 minutes to do one activity, which activity would you like to do?".

Kerri Colantuno, OTR

Cc: MD, parents

Children's Hospital
300 Longwood Avenue, Boston, MA 02115
Telephone (617) 355-6000

Behavioral Neurology

APRIL 28, 2003

PATIENT NAME: CALHOUN, ESTELLA
MEDICAL RECORD# 207-72-62
DATE OF BIRTH: 02/25/00
DATE OF VISIT: 04/28/03

ATTENDING: David K. Urion, M.D.

Patient's D.O.B.: 02/25/00

Dear Adre:

We had the pleasure of seeing Estella Calhoun in the Neurology Clinic at the Children's Hospital Boston on April 28, 2003. As you know, Estella is a 3 year old girl who has been followed in the Neonatal Neurology Program at the Children's Hospital for several years. She was referred for further evaluation of several behavioral issues.

As you know, Estella has a history of an extensive dural vein thrombosis with a small hemorrhagic right thalamic infarction in the newborn period associated with seizures. Estella has not had any seizures since the neonatal period and has been off phenobarbital since approximately 6 months of age.

Estella's mother has been concerned about several behavioral issues that seem to have started around the age of 2. She is described as very impulsive. She grabs toys when she wants them and randomly hits other children. Bolting had been a problem in the past. She is also said to be very easily distracted and cannot sit still even for a full meal. She is said to be extremely hyperactive, constantly on the go. Estella also has several sensory issues for which she sees an occupational therapist once a week here at the Children's Hospital. She is also over-sensitive to smells and does not like to be touched. She has problems with certain textures of clothing. She hates having her hair washed. Estella has also had problems with aggression toward other children as well as her brother. She has pushed children and once hit a child on the head with a block. She took a fork to her brother's face at one time. She has never seriously injured herself or others.

Estella's mother feels that the sensory issues have worsened over time but that all others have been stable since the age of 2 years.

She is currently in a Collaberative pre-school in Chestnut Hill. Apparently her teachers feel that she is over-active, one of the worse that they have seen, according to the mother. She attends pre-school five days a week.

Developmentally Estella has been achieving milestones appropriately in all spheres of